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10/785,495

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Johan Paul Marie Gerard Linnartz

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

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EXAMINER

SMITHERS, MATTHEW

ART UNIT

PAPER NUMBER

2137

DATE MAILED: 11/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/785,495

Applicant(s)

LINNARTZ ET AL.

Examiner

Matthew B. Smithers

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-9,11,12,14 and 25-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29 and 30 is/are allowed.
- 6) ☒ Claim(s) 1,3-9,11,12 and 14 is/are rejected.
- 7) ☒ Claim(s) 25-28 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/828,005.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/24/04</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement filed February 24, 2004 has been placed in the application file and the information referred to therein has been considered as to the merits.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 3-8 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the functional relationship between the storing of the summary and system data with the verifying of system data prior to reading/recording user data. The steps to store system data and a cryptographic summary of the system data for storing data onto a rewritable storage medium are understandable, however it is unclear how verifying the system data with the cryptographic summary prior to reading/recording user data has any affect on the method of storing data.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 9, 11, and 25-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 9 is directed to a storage medium for storing data where the system data is stored in one area and a cryptographic summary is stored in another area. The medium has information for an intended purpose, but the information is never used to verify the system data. In other words, there is no functional interrelationship between the storage medium and a computing device to effect a verification of system data while user data is being read/recorded. Therefore the claim is considered non-statutory. Claims 11, and 25-28 are dependent on claim 9 and do not overcome the non-functional interrelationship described above.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5, 9, 11, 12, and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. patent 6,694,023 granted to Kim.

Regarding claim 1, Kim meets the claimed limitations as follows:

"Method of storing data on a rewritable data storage medium comprising a read-only fixed data area and a recordable data area wherein: system data are stored in the recordable data area, a cryptographic summary of the system data is generated and stored in the fixed data area and the cryptographic summary is used for verification of the system data before reading and/or recording of user data." see column 6, lines 40-56 (The optical disk includes a data recording region for recording the encrypted information and a BCA used as a copy disapproval region. Recorded on the BCA is a cypher key for deciphering the encrypted information recorded on the data recording region. . . a hybrid DVD can be used as the optical disk . . . The hybrid DVD has read-only ROM area and a rewritable RAM area as the data recording region.); column 7, lines 1-25 (The encrypted information . . . can be encrypted using existing various encryption systems and techniques. . . ) and Figure 4.

Regarding claim 5, Kim meets the claimed limitations as follows:

"Method as set forth in claim 1, characterized in that a key signature algorithm is used for generating the cryptographic summary and for verifying the system data and that a signature is stored as cryptographic summary." see column 6, lines 40-56 (The optical disk includes a data recording region for recording the encrypted information and a BCA used as a copy disapproval region. Recorded on the BCA is a cypher key for deciphering the encrypted information recorded on the data recording region. . . a hybrid

DVD can be used as the optical disk . . . The hybrid DVD has read-only ROM area and a rewritable RAM area as the data recording region.); column 7, lines 1-25 (The encrypted information . . . can be encrypted using existing various encryption systems and techniques. . . ) and Figure 4.

Regarding claim 9, Kim meets the claimed limitations as follows:

"Storage medium for storing data comprising a recordable data area in which system data are stored, a read-only fixed data area in which a cryptographic summary of the system data is stored, the cryptographic summary being provided for verification of the system data before reading and/or recording of user data." see column 6, lines 40-56 (The optical disk includes a data recording region for recording the encrypted information and a BCA used as a copy disapproval region. Recorded on the BCA is a cypher key for deciphering the encrypted information recorded on the data recording region. . . a hybrid DVD can be used as the optical disk . . . The hybrid DVD has read-only ROM area and a rewritable RAM area as the data recording region.); column 7, lines 1-25 (The encrypted information . . . can be encrypted using existing various encryption systems and techniques. . . ) and Figure 4.

Regarding claim 11, Kim meets the claimed limitations as follows:

"Storage medium as set forth in claim 9, characterized in that the storage medium is a rewritable optical storage medium, in particular a CD or a DVD." see column 6, lines 40-56 (The optical disk includes a data recording region for recording the encrypted information and a BCA used as a copy disapproval region. Recorded on the BCA is a cypher key for deciphering the encrypted information recorded on the data recording

region. . . a hybrid DVD can be used as the optical disk . . . The hybrid DVD has read-only ROM area and a rewritable RAM area as the data recording region.); and Figure 4.

Regarding claim 12, Kim meets the claimed limitations as follows:

“Recording apparatus for storing data on a rewritable data storage medium comprising generating means for generating a cryptographic summary of system data and recording means for storing the system data in a recordable data area of the medium and for storing the cryptographic summary in a read-only fixed data area of the medium, the cryptographic summary being provided for verification of the system data before reading and/or recording of user data.” see Abstract; column 2, lines 47-57; column 6, lines 40-56 (The optical disk includes a data recording region for recording the encrypted information and a BCA used as a copy disapproval region. Recorded on the BCA is a cypher key for deciphering the encrypted information recorded on the data recording region. . . a hybrid DVD can be used as the optical disk . . . The hybrid DVD has read-only ROM area and a rewritable RAM area as the data recording region.); column 7, lines 1-25 (The encrypted information . . . can be encrypted using existing various encryption systems and techniques. . . ) and Figure 4.

Regarding claim 14, Kim meets the claimed limitations as follows:

“Playback apparatus for playback of user data stored on a rewritable data storage medium comprising reading means for reading system data stored in the recordable data area of the medium and for reading a cryptographic summary of the system data stored in a read-only fixed data area of the medium and verifying means for generating a cryptographic summary of the system data read from the medium and for verification

of the system data by use of the generated cryptographic summary." see Abstract; column 2, lines 35-46; column 6, lines 40-56 (The optical disk includes a data recording region for recording the encrypted information and a BCA used as a copy disapproval region. Recorded on the BCA is a cypher key for deciphering the encrypted information recorded on the data recording region. . . a hybrid DVD can be used as the optical disk . . . The hybrid DVD has read-only ROM area and a rewritable RAM area as the data recording region.); column 7, lines 1-25 (The encrypted information . . . can be encrypted using existing various encryption systems and techniques. . . ) and Figure 4.

***Allowable Subject Matter***

Claims 29 and 30 are allowed.

The following is an examiner's statement of reasons for allowance: The claimed invention is directed to a method and system for protecting content on an optical disk. Independent claims 29 and 30 each recite the uniquely distinct features of "generating a second cryptographic summary of the system data; comparing the second cryptographic summary with the cryptographic summary from the fixed data area; and recording the user data in the recordable data area based on the comparing the second cryptographic summary with the cryptographic summary from the fixed data area." The closest prior art, Kim (US 6,694,023) discloses an apparatus for protecting content on a recording medium fails to anticipate or render the above underlined limitations obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably



accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claims 25-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

With respect to claims 25-28, the cited prior art fails to specifically teach the fixed data area comprises a first fixed data area and a second fixed data area, the system data being stored in the second fixed data area and the cryptographic summary of the system data being stored in the first fixed data area.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


A. Kobayashi (US 6,549,494) discloses a method for copy protecting information stored on a recording medium.

B. Sako et al (US 6,108,423) discloses an apparatus for prohibiting copying or unauthorized use.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew B. Smithers whose telephone number is (571) 272-3876. The examiner can normally be reached on Monday-Friday (8:00-4:30) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel L. Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Matthew B Smithers  
Primary Examiner  
Art Unit 2137